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To be or not to be emotionally aware and socially motivated: How alexithymia impacts autism spectrum disorders

Luigi Pastore^a, Sara Dellantonio^b, Claudio Mulatti^c, and Gianluca Esposito^{b,d}

^aDepartment of Education, Psychology, Communication; University of Bari, 70121 Bari (BA), Italy;

^bDepartment of Psychology and Cognitive Sciences, University of Trento, 38068 Rovereto, Italy; ^cDepartment of Developmental Psychology and Socialisation, University of Padua, 35131 Padua, Italy; ^dSocial & Affiliative Neuroscience Lab, Psychology Program, Nanyang Technological University, HSS-04-14, Singapore.

Abstract: Autism often co-occurs with alexithymia, a condition characterized by no or diminished awareness of emotions that significantly impacts an individual's social relationships. We investigate how the social motivation of autistics would be eroded by comorbidity with alexithymia and why this diminished motivation would be difficult for non-autistic people to perceive and reciprocate.

Autism is a condition that often co-occurs with alexithymia: Epidemiologically, we have evidence that about 50% of autistics exceed the cutoff score for alexithymia (Berthoz & Hill 2005; Hill et al. 2004; Samson et al. 2012). Alexithymics lack or experience diminished awareness of their emotions. In emotionally salient situations, they do not experience emotions, but only the bodily sensations that typically occur during emotional episodes such as increased heart rate, blood pressure, muscular tension, visceral changes, and so forth. Because they confuse emotions with bodily sensations, they are unable to identify what they feel and to express it verbally. The possible comorbidity of alexithymia and autism is thus highly relevant: The 'alexithymia hypothesis' proposes that the emotional impairment exhibited by autistics is due to alexithymia rather than features of autism per se (Bird & Cook

2013). Whether or not we support this hypothesis, it is undeniable that the emotional deficits exhibited by autistics and alexithymics are highly similar (Fitzgerald & Bellgrove 2006). Thus, knowledge we have already obtained regarding the clinical presentation of alexithymia may be effectively transferred to help us understand autism, especially high-functioning autism, because the clinical assessment of alexithymic traits is based on self-report questionnaires that require a fairly high level of linguistic competence (Wotschack & Klann-Delius 2013).

Alexithymia has an extremely significant impact on an individual's attitudes and behaviors, as well as on their social life and social relationships (Timoney & Holder 2013). In spite of this relevance, Jaswal & Akhtar (J&A)'s study on the social motivation of autistics (which largely relies on autistics' verbal

self-report and thus applies primarily to high-functioning patients) does not take into consideration a possible comorbidity with alexithymia or the issue of how autistics experience their own and others' emotions. Yet these appear to be key elements in understanding both (1) the social motivation of autistics and (2) the reason why this motivation is neither perceived nor easily reciprocated by non-autistic people.

(1) An awareness of our emotions, as well as a capacity to identify and understand them, is a precondition for being able to regulate them; this is the reason why alexithymics have severe difficulties in emotion regulation (Taylor et al. 1997). They tend to suppress the expression of what they feel rather than deploying some cognitive strategy of reappraisal (Swart et al. 2009). This applies also to autistics who are, even in mildly frustrating situations, less able than non-autistics to use appropriate emotion regulation strategies (Samson et al. 2012). At the same time, the capacity to regulate emotions is essential to fully participate in social life, which – under normal, uncontrolled circumstances – is characterized by a number of potentially destabilizing emotional contexts. Indeed, dysfunction of emotional regulation is very stressful and can lead to perceiving everyday sociality as unpleasant, thereby reducing social motivation (Vanheule et al. 2007).

(2) People who lack (full) awareness of their emotions also have difficulty showing emotions and sharing them with others through their own expression and behavior. They also struggle to recognize these emotions in others and to react appropriately to others' emotional states through empathy. An incapacity to tune into the

emotions of others can lead to a disconnection between autistics (alexithymics) and non-autistics that cannot be easily overcome. Non-autistics have difficulty understanding and relating to autistics, because the spontaneous modality through which non-autistics connect with others requires that these others be “mentally aware” of the dynamics of the relationship: of what is emotionally going on. If this spontaneous mindreading does not work (Gallagher & Varga 2015), non-autistic people may perceive autistics to be socially uninterested and thus become less interested in relating to them.

J&A's discussion of how autistics tend to engage in eye contact much less frequently than non-autistics is an excellent example of the points made in (1) and (2): Eye contact shows that attention is shared; for the non-clinical population, it is an essential element in perceiving others to be mentally aware and engaged in a relationship. Avoiding eye contact is thus naturally interpreted as a sign of lack of interest in a relationship. The authors suggest, however, that autistics do not avoid eye contact because they lack social motivation, but rather, because they seek to “reduce or avoid stress” (p. 13). Indeed, evidence from people suffering from both alexithymia and autism shows that eye contact arouses emotions, which generate anxiety, discomfort, and avoidance (Bird & Richardson 2011; Bird et al. 2010; Fujiwara 2018; Hadjikhani et al. 2017). This leads to an impasse: For typically developing individuals, mutual gaze is an essential means for tuning into non-verbal participation in a relationship; but while autistics who are also alexithymics also experience the power of mutual gaze, they cannot deal with the

emotions it arouses, and therefore they avoid it.

In our view, this suggests that, even though autistics are socially motivated, social interactions might be much less rewarding for them than they are for non-autistics. The problem of how to make such interactions less difficult, by avoiding conditions that may potentially lead to emotional dysregulation, still remains unsolved. On a clinical level, it also indicates the need to train non-autistics as well as autistics to interact with each other. In fact, given that certain behaviors typical of autism spectrum disorder (ASD) are naturally interpreted by non-autistics as signs of avoidance in a relationship, non-autistics must be taught to systematically ignore these signals. On the other hand, given that autistics have emotion recognition deficits (possibly pursuant to their alexithymia – Oakley et al. 2016), they must be trained to understand the emotional expressions of others by using alternative, externally focused cognitive means. One such strategy is the use of explicit instructions to infer the mental states of others in emotionally salient situations and to respond guided by adhering to prescriptions for specific patterns of behavior (Lumley et al. 2007). More generally, a deeper assessment of the interaction between alexithymia and ASD may provide an opportunity to test J&A's hypothesis and may also lead to suggestions on how to treat autistics (Poquérusse et al. 2018).

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